

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently amended) A method for selectively auditing accesses to a
2 relational database system, comprising:
3 receiving a query from a client at a database server that processes queries
4 for the relational database system, ~~wherein the query can be a read-only transaction~~
5 wherein the relational database system comprises a plurality of relational tables,
6 wherein each of the relational tables includes an auditing flag which indicates
7 whether auditing is enabled for the relational table;
8 determining if auditing is enabled by checking the auditing flag;
9 if so, automatically modifying the query prior to processing the query, so
10 that processing the query causes an audit record to be created and recorded only for
11 selected rows in relational tables that are accessed by the query and that satisfy an
12 auditing condition, wherein the auditing condition specifies selecting a row based
13 on a value of a field in the row in the relational database;
14 processing the query at the database server to produce a query result;
15 conditionally creating the audit record only for rows in relational tables that
16 are actually accessed by the query and that satisfy the auditing condition;
17 recording the audit record in an audit record store; and
18 returning the query result to the client.

1 2 (Canceled).

1 3. (Original) The method of claim 1, wherein the auditing condition is
2 associated with a table in the relational database system.

1 4. (Original) The method of claim 1, wherein the auditing condition
2 includes a plurality of auditing conditions.

1 5. (Original) The method of claim 1, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 6 (Canceled).

1 7. (Previously presented) The method of claim 31, wherein auditing is
2 enabled on a table by table basis.

1 8. (Original) The method of claim 1, wherein the audit record is created
2 while the query result is being generated.

1 9. (Original) The method of claim 1, wherein the audit record is created
2 after the query result is generated.

1 10. (Original) The method of claim 1, wherein the auditing condition
2 includes a condition for a field within the relational database system.

1 11. (Currently amended) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to perform a
3 method for selectively auditing accesses to a relational database system, the method
4 comprising:
5 receiving a query from a client at a database server that processes queries
6 for the relational database system, ~~wherein the query can be a read-only transaction~~
7 wherein the relational database system comprises a plurality of relational tables,
8 wherein each of the relational tables includes an auditing flag which indicates
9 whether auditing is enabled for the relational table;
10 determining if auditing is enabled by checking the auditing flag;

11 | if so, automatically modifying the query prior to processing the query, so
12 that processing the query causes an audit record to be created and recorded only for
13 selected rows in relational tables that are accessed by the query and that satisfy an
14 auditing condition, wherein the auditing condition specifies selecting a row based
15 on a value of a field in the row in the relational database;
16 processing the query at the database server to produce a query result;
17 conditionally creating the audit record only for rows in relational tables that
18 are actually accessed by the query and that satisfy the auditing condition;
19 recording the audit record in an audit record store; and
20 returning the query result to the client.

1 12 (Canceled).

1 13. (Original) The computer-readable storage medium of claim 11, wherein
2 the auditing condition is associated with a table in the relational database system.

1 14. (Original) The computer-readable storage medium of claim 11, wherein
2 the auditing condition includes a plurality of auditing conditions.

1 15. (Original) The computer-readable storage medium of claim 11, wherein
2 the audit record includes:
3 a user name for a user making the query;
4 a time stamp specifying a time of the query; and
5 a text of the query.

1 16 (Canceled).

1 17. (Previously presented) The computer-readable storage medium of claim
2 32, wherein auditing is enabled on a table by table basis.

1 18. (Original) The computer-readable storage medium of claim 11, wherein
2 the audit record is created while the query result is being generated.

1 19. (Original) The computer-readable storage medium of claim 11, wherein
2 the audit record is created after the query result is generated.

1 20. (Original) The computer-readable storage medium of claim 11, wherein
2 the auditing condition includes a condition for a field within the relational database
3 system.

1 21. (Currently amended) An apparatus that selectively audits accesses to a
2 relational database system, comprising:

3 a database server;

4 a receiving mechanism, at the database server, that is configured to receive
5 a query from a client, ~~wherein the query can be a read-only transaction wherein the~~
6 database server processes queries for the relational database system, wherein the
7 relational database system comprises a plurality of relational tables, wherein each
8 of the relational tables includes an auditing flag which indicates whether auditing is
9 enabled for the relational table;

10 a determination mechanism that is configured to determine if auditing is
11 enabled by checking the auditing flag;

12 a query modification mechanism that is configured to modify the query
13 prior to processing the query, so that processing the query causes an audit record to
14 be created and recorded only for selected rows in relational tables that are accessed
15 by the query and that satisfy an auditing condition, wherein the auditing condition
16 specifies selecting a row based on a value of a field in the row in the relational
17 database;

18 a query processor that is configured to process the query at the database
19 server to produce a query result;

20 an auditing mechanism that is configured to,

21 conditionally create the audit record only for rows in
22 relational tables that are actually accessed by the query and that
23 satisfy the auditing condition, and to

24 record the audit record in an audit record store; and

25 a returning mechanism that returns the query result to the client.

1 22 (Canceled).

1 23. (Original) The apparatus of claim 21, wherein the auditing condition is
2 associated with a table in the relational database system.

1 24. (Original) The apparatus of claim 21, wherein the auditing condition
2 includes a plurality of auditing conditions.

1 25. (Original) The apparatus of claim 21, wherein the audit record includes:
2 a user name for a user making the query;
3 a time stamp specifying a time of the query; and
4 a text of the query.

1 26 (Canceled).

1 27. (Previously presented) The apparatus of claim 33, wherein the auditing
2 mechanism is configured to enable auditing on a table by table basis.

1 28. (Original) The apparatus of claim 21, wherein the auditing mechanism
2 is configured to create the audit record while the query result is being generated.

1 29. (Original) The apparatus of claim 21, wherein the auditing mechanism
2 is configured to create the audit record after the query result is generated.

1 30. (Original) The apparatus of claim 21, wherein the auditing condition
2 includes a condition for a field within the relational database system.

1 31. (Previously presented) The method of claim 1, wherein creating the
2 audit record includes:
3 determining if auditing is enabled; and

1 creating the audit record if auditing is enabled.

1 32. (Previously presented) The computer-readable storage medium of
2 claim 11, wherein creating the audit record includes:
3 determining if auditing is enabled; and
4 creating the audit record if auditing is enabled.

1 33. (Previously presented) The apparatus of claim 21, wherein the auditing
2 mechanism is configured to:
3 determine if auditing is enabled; and to
4 create the audit record if auditing is enabled.